



US 20140328246A1

(19) **United States**(12) **Patent Application Publication****Xu et al.**(10) **Pub. No.: US 2014/0328246 A1**(43) **Pub. Date: Nov. 6, 2014**(54) **MOBILE RELAY SUPPORT IN
RELAY-ENHANCED ACCESS NETWORKS**(75) Inventors: **Xiang Xu**, Nanjing (CN); **Simone Redana**, Munich (DE); **Hanns Juergen Schwarzbauer**, Grobenzell (DE); **Richard Waldhauser**, Munich (DE)(73) Assignee: **Nokia Solutions and Networks Oy**, Espoo (FI)(21) Appl. No.: **14/348,644**(22) PCT Filed: **Sep. 30, 2011**(86) PCT No.: **PCT/EP2011/067126**

§ 371 (c)(1),

(2), (4) Date: **Jun. 20, 2014****Publication Classification**(51) **Int. Cl.****H04W 88/04**

(2006.01)

H04W 36/08

(2006.01)

(52) **U.S. Cl.**CPC **H04W 88/04** (2013.01); **H04W 36/08** (2013.01)USPC **370/315**

(57)

ABSTRACT

Measures are provided for mobile relay support in relay-enhanced access networks. Such measures include setting up a first packet data connection for traffic in a relay-enhanced access network, which relates to first-type user terminals using the same access technology as a base station, from a mobile relay towards a packet data network via a first packet gateway functionality collocated with the base station currently serving the mobile relay, and setting up a second packet data connection for traffic in the relay-enhanced access network, which relates to second-type user terminals using another access technologies as the base station and the mobile relay, from the mobile relay towards the packet data network via a second packet gateway functionality external to the base station currently serving the mobile relay.

